

PROJECT DESCRIPTION

1. GENERAL

THIS PROJECT INVOLVES THE MODIFICATION TO AN EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF MD 5 (BRANCH AVE.) AND BEECH ROAD/OXFORD DRIVE IN PRINCE GEORGE'S COUNTY.

THE TEMPORARY WOOD POLE ON THE SOUTHWEST QUADRANT SHALL BE REPLACED WITH A STEEL STRAIN POLE. THE SPAN WIRES AND EQUIPMENT WILL BE ADJUSTED. A NEW SERVICE FEED AND PHONE DROP SHALL BE INSTALLED. TRAFFIC BARRIER SHALL BE INSTALLED TO PROTECT THE MASTER AND LOCAL CONTROLLER CABINETS.

MD 5 IS ASSUMED TO TRAVEL IN A NORTH-SOUTH DIRECTION.

11. INTERSECTION OPERATION

THE INTERSECTION SHALL CONTINUE TO BE THE MASTER LOCATION FOR THE SYSTEM. THE LOCAL SIX-PHASE, FULL-TRAFFIC-ACTUATED OPERATION WITH EXCLUSIVE LEFT TURN FOR SOUTHBOUND MD 5 AND DOUBLE EXCLUSIVE LEFT TURNS FOR NORTHBOUND MD 5 WILL REMAIN. BEECH RD/ OXFORD DRIVE OPERATE CONCURRENTLY. THE ADVANCE HAZARD IDENTIFICATION BEACON ON THE NORTH LEG WILL CONTINUE TO CONTINUOUSLY FLASH. PHASES 2 & 5 OPERATE THE FIRE PRE-EMPTION.

THE EXISTING LOCAL SOLID STATE EIGHT-PHASE, FULLY-TRAFFIC-ACTUATED CONTROLLER WITH ALL NECESSARY EQUIPMENT HOUSED IN A SIZE '6' BASE MOUNTED CABINET SHALL BE UTILIZED FOR THE MODIFICATION OF THE INTERSECTION. THE MASTER CABINET SHALL HAVE THE SERVICE FEED AND THE CABLES FOR THE HIB RE-ROUTED INTO THE LOCAL CONTROLLER CABINET.

111. SPECIAL NOTES:

1. THE CONTRACTOR SHALL CONTACT MR. ROBERT SNYDER, TRAFFIC OPERATIONS, AT 410-787-7630 FOR THE PHONE DROP; AND MR. ED RODENHIZER, SIGNAL SHOP AT 410-789-7650 FOR THE MODIFICATION TO THE CONTROLLER CABINETS AND SIGNAL EQUIPMENT. A THREE DAY NOTICE IS REQUIRED FOR COORDINATION OF STAFF.
2. COORDINATION WITH PEPCO IS REQUIRED FOR THE RELOCATION OF THE SERVICE FEED.
3. THE MODIFICATION WILL REQUIRE A SIGNAL "SHUT DOWN". THE WORK TO BE PERFORMED DURING "OFF PEAK" HOURS AND AT ONE TIME. POLICE ASSISTANCE MAY BE REQUIRED DURING THE "SHUT DOWN".

EQUIPMENT LIST "A"

A. NO EQUIPMENT TO BE SUPPLIED BY THE SHA.

PROJECT CONTACTS

CONTACT PERSONS FOR DISTRICT 3 ARE AS FOLLOWS:

MR. MAJIB SHAKIB  
ASSISTANT DISTRICT ENGINEER  
TRAFFIC - 301-513-7358

MR. JOHN WARNICK  
ASSISTANT DISTRICT ENGINEER  
CONSTRUCTION - 301-513-7336

MR. DENNIS MCMAHON  
ASSISTANT DISTRICT ENGINEER  
MAINTENANCE - 301-513-7304

MR. AUGIE REBISH  
ASSISTANT DISTRICT ENGINEER  
UTILITIES - 410-321-2841

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY:

MR. RICHARD DAFF SR.  
CHIEF, TRAFFIC OPERATIONS  
410-787-7630

MR. ROBERT SNYDER  
ASSISTANT DIVISION CHIEF,  
TRAFFIC OPERATIONS DIVISION  
410-787-7630

MR. ED RODENHIZER  
TEAM LEADER - SIGNAL OPERATIONS  
410-787-7650

MR. DEAN RANDOLPH  
PROJECT MANAGER - SIGNAL DESIGN  
410-787-5861

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR:

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
2002	1 CY	TEST PIT EXCAVATION
6001	LS	TRAFFIC BARRIER 'W' BEAM, TYPE 'H' AND TYPE 'I' END TREATMENTS, POSTS AND HARDWARE, INCLUSIVE (STANDARD MD 605.09, MD 605.10, MD 605.10-01, MD605.10-02, MD 605.22, MD 605.26-01, AND MD 605.27)
8001	5 CY	CONCRETE FOUNDATION
8002	1 EA	ADJUST / RE-RING EXISTING SPAN WIRE
8003	1 EA	REMOVE AND DISPOSE OF EXISTING EQUIPMENT
8004	400 LF	DISCONNECT PULL BACK AND REROUTE CABLES
8005	50 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8006	40 LF	1" ELECTRICAL CONDUIT- GALVANIZED RISER
8007	1 EA	3" WEATHERHEAD
8008	30 LF	2" SCHEDULE 80 PVC CONDUIT - TRENCHED
8009	40 LF	3" SCHEDULE 80 PVC CONDUIT - TRENCHED
8010	1 EA	ELECTRICAL UTILITY SERVICE EQUIPMENT 120/240 VOLTS 60 AMPS
8011	150 LF	4-CONDUCTOR OPTICOM CABLE
8012	120 LF	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 AWG - THHN/THWN (3 WIRE SERVICE)
8013	2 EA	12" TRAFFIC SIGNAL HEAD PLASTIC (R,Y,G) WITH SPAN WIRE HARDWARE
8014	1 EA	12" TRAFFIC SIGNAL HEAD PLASTIC (R,A,YA,GY) WITH SPAN WIRE HARDWARE
8015	3 EA	RELOCATE EXISTING SIGNS
8016	2 EA	GROUND ROD (3/4" DIA X 10' LENGTH)
8017	1 EA	12" X 32' (0.625 THICK) STEEL STRAIN POLE (NOTE: FOUR- 2 1/4" X 72" ANCHOR BOLTS)
8018	300 LF	1/4" SPAN WIRE FOR TETHER
8019	180 LF	3/8" SPAN WIRE
8020	2 EA	RELOCATE EXISTING TRAFFIC SIGNAL HEADS
8021	1 EA	RELOCATE EXISTING OPTICOM DETECTOR EYE

EQUIPMENT LIST "C"

ALL MATERIAL AND EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

EXISTING PHASING

1	2	3	4	5	6	7	8	9	10	11	12	13	14
◀R	◀R	R	R	◀R	◀R	R	R	R	R	R	R	R	R
◀Y	◀Y	Y	Y	◀Y	◀Y	Y	Y	Y	Y	Y	Y	Y	Y
◀G	◀G	G	G	◀G	◀G	G	G	G	G	G	G	G	G

Phase 1 & 5	◀G	◀G	R	R	◀G	◀G	R	R	R	R	R	R	R	
1 & 5 Change	THE CONTROLLER MAY SKIP TO PHASES 1 & 6 OR 2 & 5 OR 2 & 6													↕
Phase 1 & 6	◀G	◀G	G	G	◀R	◀R	R	R	R	R	R	R	R	↕
1 Change	◀Y	◀Y	G	G	◀R	◀R	R	R	R	R	R	R	R	→
Phase 2 & 5	◀R	◀R	R	R	◀G	◀G	G	G	R	R	R	R	R	↕
2 Change	◀R	◀R	R	R	◀Y	◀Y	G	G	R	R	R	R	R	↕
Phase 2 & 6	◀R	◀R	G	G	◀R	◀R	G	G	R	R	R	R	R	↕
2 & 6 Change	◀R	◀R	Y	Y	◀R	◀R	Y	Y	R	R	R	R	R	→
Phase 4 & 8	◀R	◀R	R	R	◀R	◀R	R	R	G	G	G	G	G	↕
4 & 8 Change	◀R	◀R	R	R	◀R	◀R	R	R	Y	Y	Y	Y	Y	↕
FIRE PRE-EMPTION	◀R	◀R	R	R	◀G	◀G	G	G	R	R	R	R	R	↕
CLEARANCE	◀R	◀R	R	R	◀Y	◀Y	G	G	R	R	R	R	R	→
NORMAL OPERATION 2&6	◀R	◀R	G	G	◀R	◀R	G	G	R	R	R	R	R	↕
Flashing Operation	FL/RA	FL/RA	FL/Y	FL/Y	FL/RA	FL/RA	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	↕

WIRING PHASES

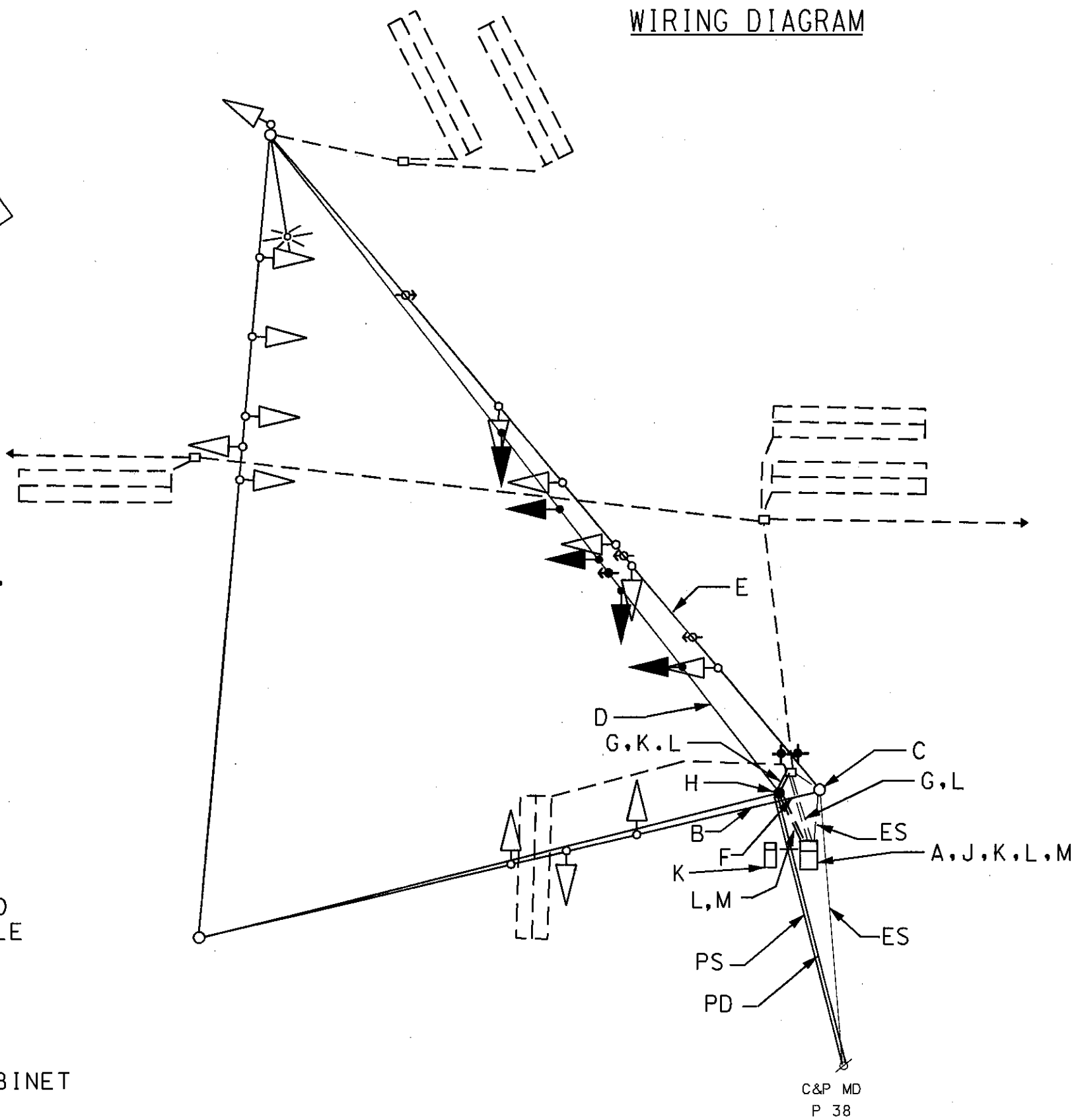
- DISCONNECT EXISTING CABLES FROM CONTROLLER. LABEL AND PULL BACK TO POLE "C".
- REMOVE SPAN WIRE AND CABLES "F" FROM "C" POLE. ATTACH TO PROPOSED POLE "H".
- STORE EXISTING LABELED CABLE FOR RE-WIRING. AFTER PROPOSED SERVICE IS INSTALLED, THEN POLE "C" AND ATTACHED EQUIPMENT SHALL BE REMOVED.
- INSTALL NEW SPAN AND SIGNAL HEADS. TRANSFER THE EXISTING SIGNAL HEADS, OPTICOM DETECTOR EYE, SIGNS AND CABLES FROM "E" SPAN. PULL SLACK FROM POLE "C".
- PULL THE CABLES FROM THE "C" POLE FOR NEEDED SLACK TO ASSIST IN THE EQUIPMENT TRANSFER.
- PULL THE CABLES FROM POLE "C" FOR NEEDED SLACK TO ASSIST IN THE TRANSFER OF EXISTING SPAN WIRE WITH EQUIPMENT TO POLE "H".
- USE CONDUIT TO RE-ROUTE EXISTING CABLE "B+D" TO CABINET "A".
- PROPOSED POLE WITH RELOCATED SPAN. PROPOSED SPAN, AND EQUIPMENT. PULL CABLES AND SLACK TO WEATHERHEAD AND RE-ROUTE CABLE DOWN STRAIN POLE THROUGH HANDHOLE INTO CABINET "A". INSTALL SERVICE FEED EQUIPMENT.
- RE-WIRE EXISTING LABELED CABLES TO APPROPRIATE CONNECTION TO CONTROLLER INSIDE EXISTING CABINET.
- SERVICE AND HIB WIRING IN THE MASTER CONTROLLER CABINET TO BE RE-ROUTED TO THE LOCAL CONTROLLER CABINET.

NOTE: THE CONTRACTOR CAN DECIDE THE ORDER OF "B & D" PHASES TO BE PERFORMED.

- L - NO.6 AWG STRANDED BARE COPPER GROUND WIRE  
M - 1 CONDUCTOR NO. 4 AWG THHN/THWN (3 WIRE SERVICE)  
+ - GROUND ROD

- ES - EXISTING SERVICE FEED  
PD - PROPOSED PHONE DROP  
PS - PROPOSED SERVICE FEED

**CENTURY ENGINEERING, INC.**  
CONSULTING ENGINEERS - PLANNERS  
32 WEST ROAD  
TOWSON, MARYLAND 21204



**MARYLAND DOT - STATE HIGHWAY ADMINISTRATION**  
*Office of Traffic & Safety*  
**TRAFFIC ENGINEERING DESIGN DIVISION**  
GENERAL INFORMATION SHEET

MD 5 (BRANCH AVE.) / BEECH ROAD AND AND OXFORD DRIVE

DRAWN BY: S.P. & E.M.M.	F.A.P. NO. 2786T16128	TS NO. 565E	SHEET NO. 2 OF 2
CHECKED BY: E.M.M. & T.H.	S.H.A. NO. N/A	T.I.M.S. NO. G 134	
SCALE: N/A	COUNTY: PRINCE GEORGES	LOG MILE: 16000512.63	
DATE: 2/29/04			

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3/29/2004